Stakeholder-Proposed Criteria for Evaluation of Resources from the California State Perspective

A	B	C	D	E
		********** EVALUATION CRITERIA **********		
Category	**Minimum Require-ments**	**Proposed Criterion**	**Possible Measurement**	**Suggested by Stakeholder(s)**
Reliability	NERC, WECC, and CAISO	unserved energy	reflected in direct cost by using an appropriately high value for unserved energy	many
		reduction in reliability-must-run (RMR) contracts, minimum load cost compensation (MLCC) costs, and out-of-market (OOM) payments	goal is to properly include RMR, MLCC, and OOM costs in market simulation by modeling generation commitment accurately	CAISO
		minimize likelihood and consequences of terrorist threats to power system	currently undefined	BPA, others
Least-Cost	none specified	ratepayer total cost	present value (PV) of CA cost-to-load (CTL), net of utility-owned generation and transmission net revenue	many
		ratepayer levelized rate	estimate rate impact due to increase in CTL	municipals, others
		societal cost	PV of WECC total production and fixed costs	many
		modified ratepayer cost	PV of CA modified CTL (excludes gen. profit from uncompetitive conditions), net of utility generation and transmission net revenue	CAISO
		modified participants cost	PV of CA modified CTL (excludes gen. profit from uncompetitive conditions), net of CA market generation and transmission net revenue	CAISO
		market valuation	NPV of project benefits compared to costs	utilities
		portfolio fit	reflected in ratepayer, participant, or societal cost (or market valuation)	utilities
		market competitiveness	CA weighted avg. price / cost mark-up	CAISO
		seamless markets	average annual volume of imports and exports	CAISO
		infrastructure investments	total capital requirements for next 5 and 10 years	utilities
Environmental	CPUC RPS, DSM, DG goals	amount of airborne pollutants	include CO_2 , NO_x, SO_2, and particulate costs in market simulation	many
		amount of renewable energy beyond RPS requirements	percent of energy met by renewables in excess of RPS goal for that year	CEERT, others
		transmission impact	number of miles of new right-of-way, visual and environmental impact	utilities
		environmental justice	compare MWs of new projects built in low- versus higher-income zip codes; also consider population	consultant, others
		fossil fuel dependency	percent of energy needs met by fossil fuel	NRDC
		once-through water cooling impacts and thermal pollution	annual water requirements, thermal impact	CEERT
Risk	none specified	CO2 regulatory risk	include CO_2 cost in market simulation, consider as uncertain variable	many

Source: Eric Toolson, Pinnacle Consulting LLC

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		resource diversity	energy % from different resource categories in CA (DSM, DG, solar, natural gas, etc.)	NRDC, others
		project viability	qualitative evaluation regarding whether project will be built and perform according to expectations	utilities
		risk of extreme outcome	compute difference between expected cost, and average of worse 10 percent of cases	many
		insurance value	impact of extreme cases on overall expected value is already considered, risk premium could be quantified by estimating cost of obtaining equivalent coverage through other market instruments	CPUC, others
		payoff tables	information could be summarized into tables that indicate when decision is beneficial (or not); possible simplification is histogram	CPUC
		political feasibility	qualitative evaluation regarding risk relative to public and political support for project or resource scenario	CPUC
		cost overruns	qualitative assessment of ratepayer risk of incurring additional costs in the future due to cos overruns	IEPA
		project flexibility	qualitative assessment of how flexible resource decision and capital fund commitment is to changes in external factors	CPUC
		no additional infrastructure	risk should be measured against a base case of "doing nothing"	IEPA
		market	qualitative assessment of sensitivity of resource decisions to changes in market rules in CA and elsewhere	generators, CPUC
		counter-party, credit, debt equivalence	currently undefined	municipals

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